

| | Type | L # | Hits | Search Text | DBs | Time Stamp |
|---|------|-----|--------|--|--|---------------------|
| 1 | BRS | L1 | 23723 | (dielectric\$1 silicon si GAS GAAS gallium adj1 arsenide sapphire\$1 gallium adj1 nitride\$1) near12 (waveguide\$1 wave near1 guide\$1) | US- PGPUB; USPAT; EPO; JPO; DERWEN T | 2005/09/28 16:02 |
| 2 | BRS | L2 | 726 | dielectric\$1 same (waveguides wave near1 guides) same layers | US- PGPUB; USPAT; EPO; JPO; DERWEN T | 2005/09/28 16:02 |
| 3 | BRS | L3 | 203883 | dielectric\$1 near12 layer\$1 | US- PGPUB; USPAT; EPO; JPO; DERWEN T | 2005/09/28 16:02 |
| 4 | BRS | L4 | 517 | (ring\$1 disc\$1 disk\$1) same resonat\$5 same (wave near1 guides waveguides) | US- PGPUB; USPAT; EPO; JPO; DERWEN T | 2005/09/28 16:02 |
| 5 | BRS | L5 | 19 | L1 and L2 and L3 and L4 | US- PGPUB; USPAT; EPO; JPO; DERWEN T | 2005/09/28 16:02 |

| | Comments | Error Definition | Errors |
|---|----------|------------------|--------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |

| | Type | L # | Hits | Search Text | DBs | Time Stamp |
|---|------|-----|-------|---|--|---------------------|
| 6 | BRS | L6 | 59395 | (electr\$5 conduct\$5 electrod\$4 wire\$2 volt\$4) same (waveguide\$1 wave near1 guide\$1) | US- PGPUB; USPAT; EPO; JPO; DERWEN T | 2005/09/28 16:02 |
| 7 | BRS | L7 | 19 | L5 and L6 | US- PGPUB; USPAT; EPO; JPO; DERWEN T | 2005/09/28 16:02 |

| | Comments | Error Definition | Errors |
|---|----------|------------------|--------|
| 6 | | | |
| 7 | | | |

| | Type | Hits | Search Text |
|----|------|--------|---|
| 1 | BRS | 1 | 10/648717 |
| 2 | BRS | 1 | S2 and (disk\$1 ring\$1 evane\$6 doap\$5 dielectric\$3) |
| 3 | BRS | 22505 | (dielectric\$1 silicon si GAS GAAS gallium adj1 arsenide sapphire\$1 gallium adj1 nitride\$1) near12 (waveguide\$1 wave near1 guide\$1) |
| 4 | BRS | 663 | dielectric\$1 same (waveguides wave near1 guides) same layers |
| 5 | BRS | 189059 | dielectric\$1 near12 layer\$1 |
| 6 | BRS | 391 | (ring\$1 disc\$1 disk\$1) near12 resonat\$5 same (wave near1 guides waveguides) |
| 7 | BRS | 11 | S4 and S5 and S6 and S7 |
| 8 | BRS | 450 | (ring\$1 disc\$1 disk\$1) same resonat\$5 same (wave near1 guides waveguides) |
| 9 | BRS | 15 | S4 and S5 and S6 and S9 |
| 10 | BRS | 5401 | dop\$5 near12 (waveguide\$1 wave near1 guide\$1) |
| 11 | BRS | 56394 | (electr\$5 conduct\$5 electro\$4 wire\$2 volt\$4) same (waveguide\$1 wave near1 guide\$1) |
| 12 | BRS | 9224 | dop\$5 same (waveguide\$1 wave near1 guide\$1) |
| 13 | BRS | 6 | S10 and S15 |
| 14 | BRS | 9 | S14 not S16 |
| 15 | BRS | 5 | S10 and S11 |
| 16 | BRS | 15 | S10 and S12 |
| 17 | BRS | 9 | ("20040105476" "20030128922" "20020154674" "20020122615" "20020085609" "6839491" "6690687" "6411752" "4087159").pn. |

| | DBs | Time Stamp | Comments | Error Definition |
|----|---------------------------------------|-------------------|-----------------|-------------------------|
| 1 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 13:11 | | |
| 2 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 13:17 | | |
| 3 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 14:43 | | |
| 4 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 13:34 | | |
| 5 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 13:33 | | |
| 6 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 13:45 | | |
| 7 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 13:45 | | |
| 8 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 13:45 | | |
| 9 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 13:45 | | |
| 10 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 20:10 | | |
| 11 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 20:17 | | |
| 12 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 13:50 | | |
| 13 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 13:57 | | |
| 14 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 13:57 | | |
| 15 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 14:23 | | |
| 16 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/09/28 16:02 | | |
| 17 | US-PGPUB; USPAT | 2005/03/24 14:27 | | |

| | Errors | Ref # |
|-----------|---------------|--------------|
| 1 | | S1 |
| 2 | | S3 |
| 3 | | S4 |
| 4 | | S5 |
| 5 | | S6 |
| 6 | | S7 |
| 7 | | S8 |
| 8 | | S9 |
| 9 | | S10 |
| 10 | | S11 |
| 11 | | S12 |
| 12 | | S15 |
| 13 | | S16 |
| 14 | | S18 |
| 15 | | S13 |
| 16 | | S14 |
| 17 | | S20 |

| | Type | Hits | Search Text |
|----|------|------|---|
| 18 | BRS | 9 | S20 and (dielectric\$1 silicon si GAS GAAS gallium adj1 arsenide sapphire\$1 gallium adj1 nitride\$1) same (waveguide\$1 wave near1 guide\$1 layer\$1 disc\$2 ring\$1) |
| 19 | BRS | 9 | S20 and dielectric\$1 and (dielectric\$1 silicon si GAS GAAS gallium adj1 arsenide sapphire\$1 gallium adj1 nitride\$1) same (waveguide\$1 wave near1 guide\$1 layer\$1 disc\$2 ring\$1) |
| 20 | BRS | 9 | S20 and dielectric\$1 and (dielectric\$1 silicon si GAS GAAS gallium adj1 arsenide sapphire\$1 gallium adj1 nitride\$1) same (resonat\$5 waveguide\$1 wave near1 guide\$1 layer\$1 disc\$2 ring\$1) |
| 21 | BRS | 1 | "6411752".pn. |
| 22 | BRS | 1 | S24 and (dielectric\$1 silicon si GAS GAAS gallium adj1 arsenide sapphire\$1 gallium adj1 nitride\$1) same (resonat\$5 waveguide\$1 wave near1 guide\$1 layer\$1 disc\$2 ring\$1) same layers |
| 23 | BRS | 1 | 10/648717 |
| 24 | BRS | 1 | S24 and (waveguid\$3 (wave near1 guid\$3)) near7 (resonat\$5 ring\$1 disk\$1) near12 (coupl\$4 evanesc\$5) |
| 25 | BRS | 1 | S24 and (waveguid\$3 (wave near1 guid\$3)) same (resonat\$5 ring\$1 disk\$1) same (coupl\$4 evanesc\$5) same layer\$1 |
| 26 | BRS | 1 | S24 and (waveguid\$3 adj7 waveguide\$1 near7 layer\$1) |
| 27 | BRS | 1 | "20030128922" |
| 28 | BRS | 1 | S29 and (waveguid\$3 near7 layer\$1 same (resonat\$5 ring\$1 microring\$4 microreson\$5 disc\$1 disk\$1)) same layer\$1 |

| | DBs | Time Stamp | Comments | Error Definition |
|----|---------------------------------------|-------------------|-----------------|-------------------------|
| 18 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 14:47 | | |
| 19 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 15:09 | | |
| 20 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 20:59 | | |
| 21 | US-PGPUB; USPAT | 2005/03/24 16:38 | | |
| 22 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 16:39 | | |
| 23 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 17:09 | | |
| 24 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 17:18 | | |
| 25 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 17:50 | | |
| 26 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 18:06 | | |
| 27 | US-PGPUB; USPAT | 2005/03/24 18:05 | | |
| 28 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 18:09 | | |

| | Errors | Ref # |
|-----------|---------------|--------------|
| 18 | | S21 |
| 19 | | S22 |
| 20 | | S23 |
| 21 | | S24 |
| 22 | | S25 |
| 23 | | S2 |
| 24 | | S26 |
| 25 | | S27 |
| 26 | | S28 |
| 27 | | S29 |
| 28 | | S30 |

| | Type | Hits | Search Text |
|----|------|------|--|
| 29 | BRS | 1 | S29 and (waveguid\$3 near7 layer\$1 same (resonat\$5 ring\$1 microring\$4 microreson\$5 disc\$1 disk\$1)) same layer\$1 and (waveguid\$3 near7 layer\$1) |
| 30 | BRS | 1 | S29 and (waveguid\$3 near7 layer\$1 same (resonat\$5 ring\$1 microring\$4 microreson\$5 disc\$1 disk\$1)) same layer\$1 and (waveguid\$3 same layer\$1) |
| 31 | BRS | 1 | S29 and (waveguid\$3 near7 layer\$1 same (resonat\$5 ring\$1 microring\$4 microreson\$5 disc\$1 disk\$1) near3 layer\$1) same layer\$1 and (waveguid\$3 same layer\$1) |
| 32 | BRS | 0 | S29 and (waveguid\$3 same coup\$5 same layer\$1 same (resonat\$5 ring\$1 microring\$4 microreson\$5 disc\$1 disk\$1) near3 layer\$1) |
| 33 | BRS | 0 | S29 and (waveguid\$3 same coup\$5 same layer\$1 same (resonat\$5 ring\$1 microring\$4 microreson\$5 disc\$1 disk\$1) near7 layer\$1) |
| 34 | BRS | 3 | S23 and (waveguid\$3 same coup\$5 same layer\$1 same (resonat\$5 ring\$1 microring\$4 microreson\$5 disc\$1 disk\$1) near7 layer\$1) |
| 35 | BRS | 6 | S20 and (waveguid\$3 near7 (resonat\$5 ring\$1 microring\$4 microreson\$5 disc\$1 disk\$1) near7 coup\$5) |
| 36 | BRS | 1 | "20020122615" |
| 37 | BRS | 5 | S20 and (waveguides near7 (resonat\$5 ring\$1 microring\$4 microreson\$5 disc\$1 disk\$1) near7 coup\$5) |
| 38 | BRS | 1 | S38 and (waveguides near7 (resonat\$5 ring\$1 microring\$4 microreson\$5 disc\$1 disk\$1) near7 coup\$5) |
| 39 | BRS | 1 | "6411752".pn. |
| 40 | BRS | 2 | S38 S42 |
| 41 | BRS | 2 | S43 and dop\$5 |

| | DBs | Time Stamp | Comments | Error Definition |
|----|---------------------------------------|------------------|----------|------------------|
| 29 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 18:11 | | |
| 30 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 18:26 | | |
| 31 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 18:29 | | |
| 32 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 18:30 | | |
| 33 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 18:30 | | |
| 34 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 18:38 | | |
| 35 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 19:20 | | |
| 36 | US-PGPUB; USPAT | 2005/03/24 20:38 | | |
| 37 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/04/04 21:30 | | |
| 38 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 20:08 | | |
| 39 | US-PGPUB; USPAT | 2005/03/24 20:08 | | |
| 40 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 20:08 | | |
| 41 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 20:10 | | |

| | Errors | Ref # |
|-----------|---------------|--------------|
| 29 | | S31 |
| 30 | | S32 |
| 31 | | S33 |
| 32 | | S34 |
| 33 | | S35 |
| 34 | | S36 |
| 35 | | S37 |
| 36 | | S38 |
| 37 | | S39 |
| 38 | | S40 |
| 39 | | S42 |
| 40 | | S43 |
| 41 | | S44 |

| | Type | Hits | Search Text |
|----|------|------|---|
| 42 | BRS | 2 | S44 and dop\$5 same ((waveguide\$1 wave near1 guide\$1) reson\$6 ring\$2 disk\$2 disc\$3) and dop\$5 |
| 43 | BRS | 2 | S43 and (electr\$5 conduct\$5 electro\$4 wire\$2 volt\$4 contact\$1) same (waveguide\$1 wave near1 guide\$1) |
| 44 | BRS | 0 | "10040105476" |
| 45 | BRS | 1 | "20040105476" |
| 46 | BRS | 1 | S48 and (electr\$5 conduct\$5 electro\$4 wire\$2 volt\$4 contact\$1) same (waveguide\$1 wave near1 guide\$1) |
| 47 | BRS | 0 | S48 and dop\$5 same ((waveguide\$1 wave near1 guide\$1) reson\$6 ring\$2 disk\$2 disc\$3) and dop\$5 |
| 48 | BRS | 1 | S48 and dielectric\$1 and (dielectric\$1 silicon si GAS GAAS gallium adj1 arsenide sapphire\$1 gallium adj1 nitride\$1) same (resonat\$5 waveguide\$1 wave near1 guide\$1 layer\$1 disc\$2 ring\$1) |
| 49 | BRS | 0 | "10040105476" |
| 50 | BRS | 1 | "20040105476" |
| 51 | BRS | 1 | S53 and ((dop\$4 pump\$4) near12 (oxid\$3 material\$1 gain\$3)) |
| 52 | BRS | 1 | S53 and ((dop\$5 pump\$4 gain\$1) near12 (oxid\$3 material\$1 gain\$3 ring\$2 disk\$2 reson\$6)) |
| 53 | BRS | 1 | S53 and ((dop\$5 pump\$4 gain\$1) near12 (oxid\$3 material\$1 gain\$3 ring\$2 disk\$2 reson\$6)) and (ion\$2 implant\$5) same (waveguide\$2 guid\$3 active reson\$5 layer\$1) |
| 54 | BRS | 1 | S53 and ((dop\$5 pump\$4 gain\$1 confin\$5) near12 (oxid\$3 material\$1 gain\$3 ring\$2 disk\$2 reson\$6)) and (ion\$2 implant\$5 confin\$5) same (waveguide\$2 guid\$3 active reson\$5 layer\$1) |

| | DBs | Time Stamp | Comments | Error Definition |
|----|---------------------------------------|------------------|----------|------------------|
| 42 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 20:51 | | |
| 43 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 20:39 | | |
| 44 | US-PGPUB; USPAT | 2005/03/25 10:25 | | |
| 45 | US-PGPUB; USPAT | 2005/03/24 20:39 | | |
| 46 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 20:39 | | |
| 47 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 20:51 | | |
| 48 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/03/24 20:59 | | |
| 49 | US-PGPUB; USPAT | 2005/03/25 10:25 | | |
| 50 | US-PGPUB; USPAT | 2005/03/25 10:25 | | |
| 51 | US-PGPUB; USPAT | 2005/09/21 17:39 | | |
| 52 | US-PGPUB; USPAT | 2005/03/25 10:36 | | |
| 53 | US-PGPUB; USPAT | 2005/03/25 10:40 | | |
| 54 | US-PGPUB; USPAT | 2005/03/25 10:41 | | |

| | Errors | Ref # |
|-----------|---------------|--------------|
| 42 | | S45 |
| 43 | | S46 |
| 44 | | S47 |
| 45 | | S48 |
| 46 | | S49 |
| 47 | | S50 |
| 48 | | S51 |
| 49 | | S52 |
| 50 | | S53 |
| 51 | | S54 |
| 52 | | S55 |
| 53 | | S56 |
| 54 | | S57 |

| | Type | Hits | Search Text |
|----|------|------|--|
| 55 | BRS | 1 | S53 and ((dop\$5 pump\$4 gain\$1 confin\$5) near12 (oxid\$3 material\$1 gain\$3 ring\$2 disk\$2 reson\$6)) and ((ion\$2 implant\$5 confin\$5) same (waveguide\$2 guid\$3 active reson\$5 layer\$1)) |
| 56 | BRS | 2 | "6411752".pn. |
| 57 | BRS | 2 | S59 and (layer\$1 substrat\$4) |

| | DBs | Time Stamp | Comments | Error Definition |
|----|---------------------------------------|------------------|----------|------------------|
| 55 | US-PGPUB; USPAT | 2005/03/25 10:41 | | |
| 56 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/09/21 17:40 | | |
| 57 | US-PGPUB; USPAT; EPO; JPO; DERWENT | 2005/09/21 17:40 | | |

| | Errors | Ref # |
|----|--------|-------|
| 55 | | S58 |
| 56 | | S59 |
| 57 | | S60 |